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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,069

07/14/2006

Susumu Fukushima

MAT-8865US

1132

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08/19/2009

RATNERPRESTIA

P.O. BOX 980

VALLEY FORGE, PA 19482

EXAMINER

GLENN, KIMBERLY E

ART UNIT

PAPER NUMBER

2817

MAIL DATE

DELIVERY MODE

08/19/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/586,069	<b>Applicant(s)</b> FUKUSHIMA, SUSUMU	
	<b>Examiner</b> KIMBERLY E. GLENN	<b>Art Unit</b> 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-6, 9 and 12-20 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 8 and 10 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 14 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 7, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda US Patent Application Publication 2003/0216150.

Ueda disclose in figure 6, a cellular phone comprising an antenna 36; a high-frequency circuit 39 connected via a matching circuit 38 to the antenna; a first printed substrate 37a which comprises a first ground section connected to the high-frequency circuit (see paragraph [0085]); a reactance circuit comprising inductors 42 and 43, wherein inductors 42 is connected to the first ground section (see paragraph [0086]); and a second printed substrate 37b which comprises a second ground section connected to the reactance circuit.

The cellular phone, further comprising a frequency band selecting circuit which examiner considers to be a transmitter-receiver; and a cable for connecting between the terminals (62-63 and 72-73) of the switches 40 and 41. The terminals (62, 63) are connected to the first ground section while the terminals (72, 73) are connected to the second ground section as evident from Fig. 6. Therefore, the cable provides connected between the first ground section and the second ground section and the frequency band selecting circuit.

The reactance circuit includes inductors 42 and 43 and a switches 40 and 41 for switching the inductors.

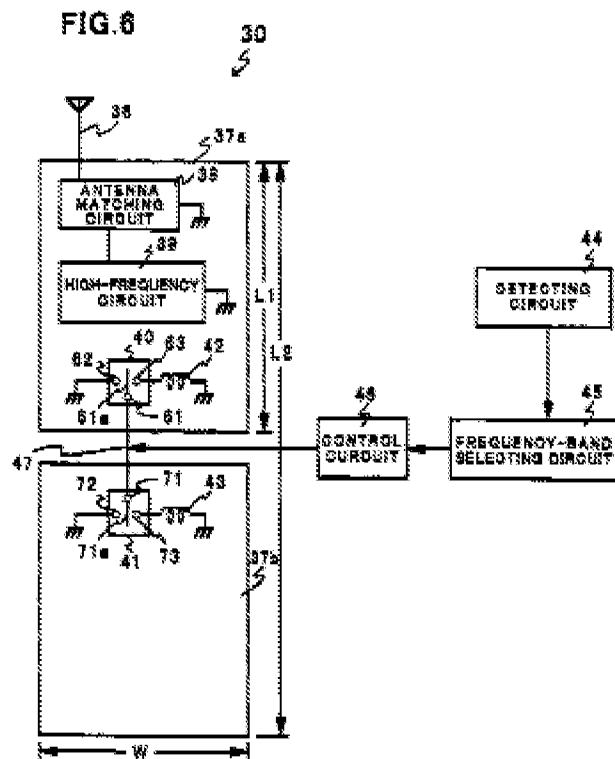
Ueda states in paragraph [0093] that on receipt of the detection signal from the detecting circuit 44, the frequency-band selecting circuit 45 selects a desired frequency band, and transmits a selection signal indicative of the thus selected frequency band, to the control circuit 46.

On receipt of the selection signal from the frequency-band selecting circuit 45, the control circuit 46 transmits a control signal to both of the first and second high-frequency switches 40 and 41 through the cable 47. In accordance with the control signal, the contact plates 61a and 71a make pivotal movement around the base contacts 61 and 71 to thereby make electrical contact with the first contact 62, 72 or the second contact 63, 73. The pivotal movement of the contact plates 61a and 71a around the base contacts 61 and 71 between the first and second contacts 62, 72 and 63, 73 causes a ground length in the cellular phone 30 to vary in accordance with a frequency band.

Thus, Ueda is shown to teach all the limitation of the claims with the exception of both the first ground section and the second ground section being formed on a (single) substrate.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct both the ground section of Ueda on a single substrate, since it has been held that the use of a one piece construction instead of the first and

second ground planes being constructed on two separate printed circuit boards as disclosed in Ueda would be merely a matter of obvious engineering choice.



### ***Allowable Subject Matter***

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3-6, 9 and 12-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: With regards to claims 3 and 12, the prior art of record does not disclose or

Art Unit: 2817

fairly teach the specific circuit configuration with emphasis on the feeder line is a coaxial line including a signal line, which is connected to the high-frequency circuit, and a shield line that is disposed so as to surround the signal line and is connected to at least any one of the first ground section and the second ground section. With regards to claims 4 and 13-20, the prior art of record does not disclose or fairly teach the specific circuit configuration with emphasis on a coaxial line having a signal line and a shield line that is disposed so as to surround the signal line and is connected to the ground section, wherein, the shield line has a first shield line and a second shield line connected to the first shield line via the reactance circuit. With regards to claim 5, the prior art of record does not disclose or fairly teach the specific circuit configuration with emphasis on the reactance circuit is formed of a parallel circuit of an inductor element and a capacitor element. With regards to claim 6 the prior art of record does not disclose or fairly teach the specific circuit configuration with emphasis on the reactance circuit includes a variable capacitance diode element.

With regards to claim 9 , the prior art of record does not disclose or fairly teach the specific circuit configuration with emphasis on the high-frequency circuit includes a receiving power detecting circuit for controlling a reactance value of the reactance circuit and an amplifier, and the receiving power detecting circuit detects receiving power of output from the amplifier.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 2, 7, 8 and 10 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIMBERLY E. GLENN whose telephone number is (571)272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-, 8300.,

Art Unit: 2817

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly E Glenn  
Examiner  
Art Unit 2817

August 13, 2009  
/K. E. G./  
Examiner, Art Unit 2817

/Robert Pascal/  
Supervisory Patent Examiner, Art Unit 2817